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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

# NOTICE OF ALLOWANCE AND FEE(S) DUE

36521

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03/30/2004

MOSER, PATTERSON & SHERIDAN LLP/ SEAGATE TECHNOLOGY LLC 595 SHREWSBURY AVENUE SUITE 100 SHREWSBURY, NJ 07702

EXA	AMINER
SUN	, XIUQIN
ART UNIT	PAPER NUMBER

2863

DATE MAILED: 03/30/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076.737	02/14/2002	Stephen G. Gonzalez	8033090	2068

TITLE OF INVENTION: APPARATUS AND METHOD FOR CHARACTERIZING GROOVED JOURNALS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/30/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 36521 03/30/2004 MOSER, PATTERSON & SHERIDAN LLP/ Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below. SEAGATE TECHNOLOGY LLC **595 SHREWSBURY AVENUE** SUITE 100 (Depositor's name) SHREWSBURY, NJ 07702 (Signature APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/076.737 02/14/2002 Stephen G. Gonzalez 8033090 2068 TITLE OF INVENTION: APPARATUS AND METHOD FOR CHARACTERIZING GROOVED JOURNALS APPLN. TYPE SMALL ENTITY **ISSUE FEE PUBLICATION FEE** TOTAL FEE(S) DUE DATE DUE \$1630 06/30/2004 NO \$1330 \$300 nonprovisional **EXAMINER** ART UNIT CLASS-SUBCLASS 2863 702-155000 SUN, XIUQIN 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single  $\ensuremath{\mathbf{Q}}$  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent "Fee Address" indication (or "Fee Address" Indication form attorneys or agents. If no name is listed, no name PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) individual corporation or other private group entity Please check the appropriate assignee category or categories (will not be printed on the patent); 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee A check in the amount of the fee(s) is enclosed ☐ Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Advance Order - # of Copies ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) (Date) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

TRANSMIT THIS FORM WITH FEE(S)

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## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspio.gov

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10/076,737	02/14/2002	Stephen G. Gonzalez	8033090 2068		
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MOSER, PATTERSON & SHERIDAN LLP/			SUN, XIUQIN		
SEAGATE TECHNOLOGY LLC 595 SHREWSBURY AVENUE			ART UNIT	PAPER NUMBER	
SUITE 100			2863		
SHREWSBURY, NJ 07702		DATE MAILED: 03/30/2004			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	
	10/076,737	GONZALEZ ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Xiuqin Sun	2863	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet with the co (OR REMAINS) CLOSED in this app or other appropriate communication (GHTS. This application is subject to	lication. If not included will be mailed in due course. THIS	 >
1. This communication is responsive to <u>03/09/2004</u> .			
2. The allowed claim(s) is/are <u>1,4,6,8-15 and 18-23</u> .		<u>:</u> :	
3. $\boxtimes$ The drawings filed on <u>14 February 2002</u> are accepted by the	ne Examiner.	=	
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> <li>3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>	been received. been received in Application No	<del></del>	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements	
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			
6. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.	:	
(a) I including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-9	948) attached	
1)  hereto or 2)  to Paper No./Mail Date			
(b) including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the O	ffice action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the			
7. DEPOSIT OF and/or INFORMATION about the depo- attached Examiner's comment regarding REQUIREMENT			
		: :	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Notice of Informal Pr	atent Application (PTO-152)	
<ol> <li>Notice of References Cited (PTO-992)</li> <li>Dotice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	6. Interview Summary	(PTO-413),	
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper No./Mail Date 8), 7. Examiner's Amendr		
Paper No./Mail Date	· —	nt of Reasons for Allowance	
<ol> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol>		:	
o. Diological Material	o		
Miles S			
U.S. Patent and Trademark Office		- <del></del>	_

### **DETAILED ACTION**

## Allowable Subject Matter

1. Claims 1, 4, 6, 8-15 and 18-23 are allowed.

### Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claim 1 is the claimed method step of establishing at least one dimension of at least one groove disposed on the one or more hydrodynamic bearing surfaces, including determining a ratio of a width of at least one hydrodynamic groove to the distance between the at least one hydrodynamic groove and at least one adjacent hydrodynamic groove. It is this step found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 4 is the inclusion of the method step of establishing at least one dimension of at least one groove disposed on the one or more hydrodynamic bearing surfaces, including determining at least one of a width, a depth, and a position of the at least one hydrodynamic groove with respect to the at least one reference plane. It is this step found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

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The primary reason for the allowance of claim 6 is the inclusion of the method step of establishing at least one dimension of at least one groove disposed on the one or more hydrodynamic bearing surfaces, including establishing the dimensions of at least one feature including determining the reference plane from data acquired during the measuring of the surface of the one or more hydrodynamic bearings and establishing the dimensions of the at least one feature, including establishing a distance from the reference plane wherein the distance defines a leading edge or trailing edge of at least one hydrodynamic groove. It is this step found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claims 8-15 is the claimed method step of determining the angular position of the hydrodynamic grooves along the circumference of the hydrodynamic bearing with respect to the longitudinal axis. It is this step found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 18-23 is the inclusion of the limitation of determining at least one of a width, a depth, and a position of the at least one hydrodynamic groove with respect to the at least one reference plane. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Application/Control Number: 10/076,737

Art Unit: 2863

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Contact Information**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun Examiner Art Unit 2863

x5 mark 25, 2004

Supervis Evaminer

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